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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,166	02/12/2004	Bart Gerard Boucherie	BOUC3015/JEK/JS	3778
23364 7590 08/14/2008 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER				
KARLS, SHAY LYNN				
ART UNIT		PAPER NUMBER		
3723				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/776,166

**Applicant(s)**

BOUCHERIE, BART GERARD

**Examiner**

Shay L. Karls

**Art Unit**

3723

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 3-4, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucherie (USPN 5728408).**

Boucherie teaches a method for manufacturing brushes, whereby bundles of fibers (not labeled in figure 9, but labeled in other figures as element 54) are provided in a brush body (84). The far ends of the fibers are subjected to an end grinding process (86) by bringing them into contact with processing equipment. The fibers and the processing equipment are mutually put into contact while the fibers are held together loosely (figure 9). The free ends opposite the far ends rest on an underlying support (not labeled but shown in figure 9, square housing that surrounds element 80). Boucherie teaches all the essential elements of the claimed invention however fails to teach that none of the fibers clamped or fixed. It is unclear whether or not the

fibers of Boucherie are clamped or fixed since the reference is silent with regards to how the fibers are held. However it is clear that the fibers are loaded into a pocket in the disk. The pocket is an opening in the disk and neither the pocket nor the disk comprise a clamping device located thereon since the fibers are passed easily from the stock to disk and then from the disk to the return cartridge. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's apparatus without a clamping device since the fibers are supported alone within the disk (80). The use of a clamping device is not necessary since the fibers are transferred easily between the stock cartridge, the disk and the return cartridge. The pockets (82) in the disk act as the clamping means by holding the fibers stationary within the pocket.

With regards to claim 3, the fibers are held together in a holder (80).

With regards to claim 4, the fibers are simply placed in a holder (the fibers are guided into the holder as it rotates).

With regards to claim 12, the method for manufacturing brushes is used for rounding off the far ends of the fibers (86).

With regards to claim 13, a grinding tool is used a processing equipment (86, col. 7, lines 20-26).

With regards to claim 14, the method is used for making toothbrushes (col. 1, line 11).

With regards to claim 15, a pusher (not labeled but shown by arrow in figure 9 near reference number 84) is used in combination with a holder (80) for pushing the fibers in a longitudinal direction. The applicant does not specify what the longitudinal direction is in

reference to, so the examiner is interpreting the longitudinal direction to be the longitudinal direction of the apparatus from reference number 84 to 88.

With regards to claim 16, bundles of fibers are placed in a holder as a function of a fiber bundle pattern of a brush or a brush part to be manufactured. After the fibers are in the holder, they are further processed to fix the fibers in a brush body. Lower portion of figure 9, shown by element 51.

With regards to claim 17, bundle of fibers are separated from a fiber stock (84) by means of a holder and temporarily remain in the holder to be processed subsequently.

With regards to claim 18, the holder is a rotating bundle remover (80) and has a plurality of take up openings (82) for receiving fiber bundles.

With regards to claim 19, the take-up openings are partly filled in the holder. Figure 9 shows all but three openings filled.

With regards to claim 20, the processed fiber bundles are released into a cartridge (51).

**Claims 2, 5-6, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucherie ('408) as applied to claim 1 above and further in view of Zahoransky ('484).**

Boucherie teaches all the essential elements of the claimed invention however fails to teach the exact type of end rounding device, one that adjusts the free length of the fibers, that is used in claims 2, 5-6, 8 and 10. Zahoransky teaches an end-rounding device wherein the free projecting length of the fiber bundle can be adjusted (col. 4, lines 5-15). Zahoransky fails to teach having the processing equipment begin with a smaller freedom of movement and then enlarge as time progresses (claim 2, 5, 6, 8, 10). Zahoransky teaches that the fiber length beyond the holder is adjustable but does not teach the method of having the fiber length increase with

time (claims 2, 5 and 10). '484 also teaches that while the length of the fibers increase, so does the distance between the abrader and the side of the holder from where the fiber protrude (claims 6 and 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zahoransky so that the fibers start out with a small amount of freedom when in contact with the abrader and gradually increase to a fiber length where the fibers have the most amount of freedom of movement. Zahoransky teaches that the deflection of the fiber length will determine the result of the rounded off ends (col. 4, lines 14-15). Therefore, adjusting Zahoransky's length so that it achieves the claimed invention would allow the fibers to be rounded in the claimed manner. Since the prior art's invention is capable of performing the method as claimed, and is therefore capable of rounding the fibers as claimed, the claimed invention is not patentably distinct from the prior art. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the modified end rounder of Zahoransky for the end rounder as taught by Boucherie because both references teach equivalent apparatuses. Both end rounders perform the same function of rounding fibers and therefore are considered interchangeable. Since Boucherie is silent as to what type of end rounder is used, Zahoransky's end rounder could be used in place of Boucherie's to allow different types of end rounding to occur due to the fiber length adjustment of Zahoransky.

**Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucherie ('408) in view of Zahoransky ('484) as applied to claims 5 and 8, respectively above.**

Boucherie in view of Zahoransky teaches all the essential elements of the claimed invention however fail to teach that the free length of the fiber is smaller than 1 millimeter. It

would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Boucherie in view of Zahoransky so that the length of the fiber is less than 1 millimeter as stated in claims 7 and 9, since the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device. A method with a device having the claimed relative dimensions would not perform differently than the prior art device and therefore, the method and the claimed device is not patentable distinct from the prior art (MPEP 2144).

**Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boucherie ('408) in view of Zahoransky ('484) as applied to claim 5 above and further in view of Boucherie (USPN 6290303).**

Boucherie ('408) in view of Zahoransky teach all the essential elements of the claimed invention however fail to teach that a push-out element is used to change the free length of the fibers. Boucherie ('303) teaches using a push-out element (24) for changing the free length of bristles (4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Boucherie ('408) in view of Zahoransky so that there is a push-out element is used as taught by Boucherie ('303) for pushing the fibers bundles into the holder so that various fiber bundle arrangement can be obtained, such as angled bristles or bristles of various lengths (col. 5, lines 29-41).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined

application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 and 2 of U.S. Patent No. 6372163 in view of Boucherie ('408).**

Although the conflicting claims are not identical, they are not patentably distinct from each other because '163 teaches a bundle of fibers (lines 1-3 of claims 1 and 2). The ends of the fibers are subjected to a processing by bringing them into contact with processing equipment (the ends of the fibers are brought into contact with an end rounding tool). '163 fails to teach that the fibers are fit within a brush body and that the fibers are loosely held in the body. It would have been obvious to place the fibers in a brush body so that the fibers can be used for an intended purpose. If the fibers are to be used for a toothbrush, then the brush body should be a toothbrush. Additionally a brush body will assist in holding the fibers in place when end rounding. Also, Boucherie, as stated above, teaches holding fibers together loosely and applying a process to the ends. It would have been obvious to modify the brush body of '163 so that it loosely holds the fibers as taught by Boucherie since it considered to be well known in the art to apply a process to fiber ends when they are loosely held in a body.



***Response to Arguments***

Applicant's arguments filed 5/5/08 have been fully considered but they are not persuasive.

The applicant argues that since '408 is silent as to how the bristles are held in the disc, it cannot be determined that there is not a clamping device present. In response, since the reference does not teach a clamping device (which would be an essential element of the invention) that it is clear that there is no clamping device present. Further, from the figures it is clear that the bristles are fed into the disc and are held in place by the pockets. These pockets function as a holding or "clamping" means without actually clamping the bristles. The exact amount of bristles are inserted into the pocket to hold the bristles stationary.

The applicant also argues that the raw fiber supply station cannot be considered a brush body however in response, the applicant does not provide any limitations as to what the brush body is. Therefore, anything that holds bristles can be considered a brush body. It is suggested to further define what the brush body is by giving it structure in the claim limitations.

With regards to Zahoransky ('484), the reference is used solely to show the teaching of an end rounder. The reference ('484) teaches the deficiencies in the end rounder of Boucherie and a simple substitution of prior art end rounders would have been an obvious modification. The fact that '484 teaches a clamping device is irrelevant since the examiner is only using the reference for the end rounder. The '484 reference contains many other elements that are not part of the present invention also, but the rejection is based on the modification of '408's end rounder with '484's end rounder.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-W.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shay L Karls/  
Primary Examiner, Art Unit 3723